National Institute of Environmental Health Sciences

Climate change, workplace heat exposure, and occupational health and productivity in Central America

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Abstract:

Climate change is increasing heat exposure in places such as Central America, a tropical region with generally hot/humid conditions. Working people are at particular risk of heat stress because of the intrabody heat production caused by physical labor. This article aims to describe the risks of occupational heat exposure on health and productivity in Central America, and to make tentative estimates of the impact of ongoing climate change on these risks. A review of relevant literature and estimation of the heat exposure variable wet bulb globe temperature (WBGT) in different locations within the region were used to estimate the effects. We found that heat stress at work is a real threat. Literature from Central America and heat exposure estimates show that some workers are already at risk under current conditions. These conditions will likely worsen with climate change, demonstrating the need to create solutions that will protect worker health and productivity.

Source: Ask your librarian to help locate this item.

Resource Description

Exposure : ☑

weather or climate related pathway by which climate change affects health

Temperature

Temperature: Extreme Heat

Geographic Feature: ☑

resource focuses on specific type of geography

None or Unspecified

Geographic Location: ☑

resource focuses on specific location

Non-United States

Non-United States: Non-U.S. North America

Health Impact: ☑

specification of health effect or disease related to climate change exposure

Injury, Other Health Impact

Other Health Impact: heat stress

Mitigation/Adaptation: ☑

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern: ☑

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status, Workers

Resource Type: ☑

format or standard characteristic of resource

Research Article, Review

Resilience: ☑

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale: ☑

time period studied

Time Scale Unspecified